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6th Annual Governors State University Student Research Conference Proceedings

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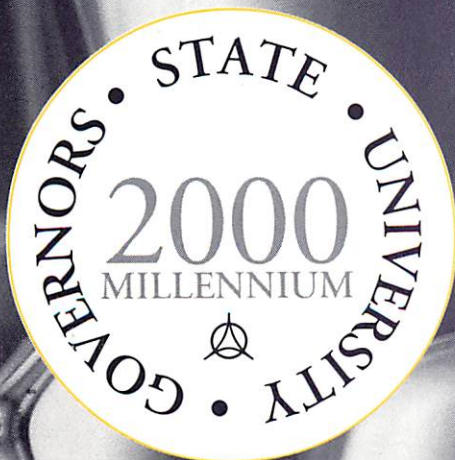
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6TH ANNUAL GSU Student Research Conference

*Governors State
University*

**Friday
May 26, 2000**



Proceedings of the 6th Annual GSU Student Research Conference

**Governors State University
University Park, IL 60466**

May 26, 2000

Editor: Shelly Kumar



Governors State University

College of Arts and Sciences

College of Business and Public Administration

College of Education

College of Health Profession

**6th Annual GSU
Student Research Conference**

Is dedicated to

Paula Wolff

GSU President, 1992-2000

for her five years of support and encouragement that has brought
success to this conference

TABLE OF CONTENTS

	Page
President's Message	5
Conference Steering Committee Message	6
Keynote Speaker Biography	7
Abstract: Keynote Speech	8
Program Summary	9
Conference Program	10
Abstracts of Papers	14
Podium Presentations	15
Poster Presentations	25
Student Participants	36
Faculty Sponsors	37
Conference Steering Committee	38
Acknowledgments	39
Notes	40



May 2000

Dear Student Researcher:

Welcome to the Sixth Annual Governors State University Research Conference. Thank you for sharing the results of your research with the GSU academic community.

Scholarship encompasses many types of research: the basic research of discovery, applied research, pedagogical research, and integrative research.

The projects reported on in the Conference include all of these. The common thread is the creation of new knowledge.

Congratulations to you and to the faculty who have taught you. We are proud to have you as members of the GSU community.

Thank you for taking part in research—in the adventure of creating new knowledge.

Sincerely,



Stuart I. Fagan
President

A MESSAGE FROM THE CONFERENCE STEERING COMMITTEE

The steering committee is pleased to announce the 6th Annual GSU Student Research Conference to be held on May 26, 2000. The committee is delighted to dedicate the conference to Dr. Paula Wolff, the immediate past president of GSU, who was instrumental in promoting the conference since its inception in 1995, and who provided unconditional support for its success. The committee has learnt that President Stuart Fagan is equally excited about the conference, and has endorsed the effort of students and faculty involved in the conference enthusiastically. The committee would like to thank Dr. Carolyn Fraser of College of Health Profession, who served as the steering committee member for the past five years. She is replaced by an equally dedicated member, Dr. Cynthia Carr of College of Health Profession.

In the past five conferences, the quality of the presentations were at par with presentations at any professional conferences. We are confident that today again we will witness another session of quality presentations by our students. This conference will be presented in its original format and with its original objectives:

1. To provide students an opportunity to present their research work before an audience of their peers, and to use the comments they receive to improve presentations made at professional conferences.
2. To provide a forum to highlight research accomplishments at GSU, and honor students presenting their research work.
3. To generate enthusiasm among student body in general, and encourage them to pursue research and other scholarly activities.
4. To enhance communications in the area of research among the four colleges at GSU. The interactions may also lead to collaborative work among students and faculty of different colleges.
5. To enhance the image of GSU in the area of teaching, as research is considered integral part of teaching at the university level. In the long run larger number of students attracted toward research would enroll at GSU to pursue higher education.

The committee hopes that you will enjoy the conference, that you share in the excitement of doing research, and that you will look forward to participating in the future students and professional conferences.

The Student Research Conference Steering Committee is proud to announce that the key note speaker for the lunch will be:

Dr. Ralph W. Nicholas

Professor of Anthropology and Social Sciences
University of Chicago

who will present a talk titled

"Forty Years in Bengal Delta"

Ralph W. Nicholas is the William Rainey Harper Professor of Anthropology and of the Social Sciences at the University of Chicago. He had his undergraduate education at Wayne State University in Detroit (1957); his M.A. (1958) and Ph.D. (1962) are from the Department of Anthropology at the University of Chicago. He has done extensive field work in India and Bangladesh, and has specialized in the study of Bengali society and culture throughout his professional career. At the University of Chicago he has played a major role in undergraduate education, as chairman and staff member of a core social sciences course, as a teacher in the Indian Civilization program, and as the Dean of the College. He also served for five years as Deputy Provost of the University. He is now the President of the International House of Chicago.

FORTY YEARS IN THE BENGAL DELTA

Ralph W. Nicholas

Professor of Anthropology and Social Science
University of Chicago

ABSTRACT

I am within a few weeks of the fortieth anniversary of my first trip to Bengal, in eastern India, and I want to mark this anniversary by reflecting on the research that I designed 40 years ago, and on some of the things I have learned by keeping my attention fixed on deltaic Bengal throughout this period. The project that I had devised for my dissertation research seems to me to have been well ahead of its time. It dealt with the ecology of rural societies in the Bengal delta. I was excited by the problem of human-environmental interaction at the level of cultural rather than biological integration. As it appeared to me then, the problems of living in the deltaic environment, with regular annual flooding, extensive riverbank erosion, continuous deposition of fertile alluvial lands, and agriculture inextricably linked to the vicissitudes of the monsoon all contributed to a perilous pattern of life. Yet rural population densities throughout the region were increasing steadily and surpassed 1,000 persons per square mile of rural settlement over extensive areas of active delta formation. In those same areas today, there are more than 2,000 persons per square mile. My research is directed to understanding the cultural adaptations that make possible such extraordinary rural population densities.

PROGRAM SUMMARY

Engbretson Hall:

9:00 A.M. – 9:30 A.M.	Conference Registration
9:30 A.M. – 9:50 A.M.	Welcome and Introduction
9:50 A.M. – 10:50 A.M.	Podium Presentations
10:50 A.M. – 11:10 A.M.	Refreshment Break
11:10 A.M. – 11:50 A.M.	Podium Presentations
11:50 A.M. – 12 Noon	Preparation for Posters

Hall of Honors:

12:00 Noon – 12:45 P.M.	Lunch
12:45 P.M. – 12:50 P.M.	Greetings and Introduction of Speaker
12:50 P.M. – 1:30 P.M.	Keynote Speaker, Dr. Ralph W. Nicholas
1:30 P.M. – 2:20 P.M.	Poster Presentations and Mixer

Engbretson Hall:

2:20 P.M. – 2:30 P.M.	Certificates Presentation to Student Participants
2:30 P.M. – 3:30 P.M.	Podium Presentations
3:30 P.M. – 3:50 P.M.	Refreshment Break
3:50 P.M. – 4:30 P.M.	Podium Presentations
4:30 P.M. – 4:35 P.M.	Concluding Remarks

CONFERENCE PROGRAM

Conference Registration

9:00 A.M. Hall of Governors

Program Commencement Engbretson Hall

9:30 A.M. **Welcome and Introduction:**
Dr. Shelly Kumar
Division of Science
College of Arts and Sciences

Greetings:
Dr. Jane Wells, Acting Provost

Podium Presentations Engbretson Hall

Session I Moderator:
Dr. Cynthia Carr
Division of Nursing and Health Sciences
College of Health Professions

9:50 A.M. "THE DEVELOPMENT OF AN ASSISTIVE TECHNOLOGY GUIDE FOR CHILDREN WITH LEARNING DISABILITIES", Heather Froehner, Marcus Matthews, and Jessica Pedersen*, Occupational Therapy, CHP. p 16.

10:10 A.M. "STUDIES IN MOTION GRAPHICS: PANEL DISCUSSION/MULTI-MEDIA PRESENTATION", John Jung, Carol Weber, Kevin Brady, Archie Cocke, and Paul Schranz*, Art and Media Communications, CAS. p 17. *Note: This is a double presentation by four students.*

10:50 A.M. **Refreshment Break**

Session II Moderator:
Dr. Linda Buyer
Division of Psychology and Counseling
College of Education

11:10 A.M. "CONFLICT RESOLUTION STYLES OF SPECIAL EDUCATION AND REGULAR EDUCATION STUDENTS", Olga Boutov and Maribeth Montgomery Kasik* Multicategorical Special Education, CE. p 18.

11:30 A.M. "TAJIKISTAN MIGRATION", Alisher Bozorov, and Francis Kostarelos*, Social Science, CAS, p 19.

11:50 A.M. **Preparation for Posters – Hall of Honors**

Conference Lunch

Hall of Honors

12:00 P.M.

Lunch

12:45 P.M.

Greetings and Introduction of Speaker:
Dr. Shelly Kumar

Keynote Speaker

Dr. Ralph W. Nicholas

Professor of Anthropology and Social Sciences
University of Chicago

Speaking on

"Forty Years in Bengal Delta"

Poster Presentations and Mixer Hall of Honors

1:30 P.M.

"IDENTIFYING THE SAFETY NEEDS OF THE WELL-ELDERLY IN A COMMUNITY SETTING: A POTENTIAL ROLE FOR OCCUPATIONAL THERAPY", Colette Bentley, Sarah Carter, and Patti Kalvelage*, Occupational Therapy, CHP. p 26.

"A SINGLE CASE STUDY INVESTIGATING RHEUMATOID ARTHRITIS CLIENT'S SATISFACTION WITH AQUATIC THERAPY", Keri Code and SuAnne Griesse, Cynthia Carr*, Occupational Therapy, CHP. p 27.

"THE POWER OF THE MEDIA: FRAMING ISSUES AND INFLUENCING PUBLIC OPINION", Karyn Purvis and Ana Kong*, Communications and Training, CAS. p 28.

"CAN PET FACILITATED THERAPY BE USED TO ENHANCE SOCIAL SKILLS IN GERIATRIC CLIENTS?", LaShanda Gayle, LaTonya Easley, and Elizabeth Cada*, Occupational Therapy, CHP. p 29.

"EFFECTS OF MEDICARE A ON JOB SATISFACTION AMONG OCCUPATIONAL THERAPISTS AND OCCUPATIONAL THERAPY ASSISTANTS", Naheed Karim, Parul Patel, and Jessica Pedersen*, Occupational Therapy, CHP. p 30.

"SMALL MAMMAL DISTRIBUTION IN URBAN-RURAL GRADIENTS", Randy Grass and John Yunger*, Environmental Biology, CAS. p 31.

"THE IMPACT OF INTERDISCIPLINARY CURRICULUM ON THE PERCEPTIONS OF GRADUATE HEALTH PROFESSIONS STUDENTS", Kathleen Noonan, Patricia Jaminski, and Patti Kalvelage*, Occupational Therapy, CHP. p 32.

"EXPLORING THE ROLES AND FUNCTION OF OCCUPATIONAL THERAPY IN EARLY IDENTIFICATION OF CHILDREN AT RISK", Amy Griffin, Jennifer Kress, and Elizabeth Cada*, Occupational Therapy, CHP. p 33.

"PREPARATION OF QUINOLINE-8-CARBALDEHYDE AND ITS REACTION WITH RHENIUM-BOUND HYDRIDES", Nicole Pilate and Gregory A. Moehring*, Analytical Chemistry, CAS. p 34.

"CLIENT-CENTERED OCCUPATIONAL THERAPY: THE EFFECTS OF CLIENT-CENTERED PRACTICE ON CLIENT SATISFACTION AND THE CLIENT-THERAPIST RELATIONSHIP", Melissa Souden, Heather Weinstein, and Patti Kalvelage*, Occupational Therapy, CHP. p 35.

Certificates Presentation Engbretson Hall

2:20 P.M. Dr. Jane Wells, Acting Provost

Podium Presentations Engbretson Hall

Session III Moderator:

Dr. Frances Kostarelos
Division of Liberal Arts
College of Arts and Sciences

2:30 P.M. "ENCRYPTION IN GLOBAL COMMUNICATION: ITS POTENTIAL AND ITS PROBLEMS", Ray Smilgius (Faculty Sponsor: Winfried Rudloff), Computer Science, CAS. p 20.

2:50 P.M. "AN INVESTIGATION FOR THE NECESSITY OF STRESS ASSESSMENT QUESTIONNAIRE UTILIZATION IN PHYSICAL DISABILITY OUTPATIENT SETTINGS AS A CONSISTENT MEANS OF ADDRESSING A CLIENT'S PSYCHOSOCIAL COMPONENT", Thomas G. Bancsi and Cynthia Carr*, Occupational Therapy, CHP. p 21.

3:10 P.M. "THE RESPONSE TO OPPOSITIONAL BEHAVIOR IN A PARTIAL HOSPITALIZATION PROGRAM: A MODEL OF BEHAVIOR MANAGEMENT ", Joseph Day and Linda Buyer*, Psychology, CE. p 22.

3:30 P.M.

Refreshment Break

Session IV Moderator:

Dr. Akkanad Issac

Division of Management, Marketing, and Public
Administration

College of Business and Public Administration

3:50 P.M.

"EFFECT OF VERBAL POSITIVE REINFORCEMENT VERSUS
VERBAL PUNISHMENT ON SUSTAINED ATTENTION IN A
PATIENT WITH RIGHT CVA", Tonya Kohut and Jay Lubinski*,
Communication Disorders, CHP. p 23.

4:10 P.M.

"THE ELECTRIC CITY & COMMONWEALTH EDISON COMPANY",
Marcia Lindroth Batastini and Constance Cook*, Business Administration,
CBPA. p 24.

4:30 P.M.

Concluding Remarks

Dr. Shelly Kumar

ABSTRACTS OF PAPERS

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Governors State University
University Park , Illinois

PODIUM PRESENTATIONS

THE DEVELOPMENT OF AN ASSISTIVE TECHNOLOGY GUIDE FOR CHILDREN WITH LEARNING DISABILITIES

Heather Froehner, Marcus Matthews, and Jessica Pedersen*

Occupational Therapy
Division of Nursing and Health Science, CHP

ABSTRACT

The purpose of this project is to compile information regarding low to high assistive technology products used to enhance educational skills for children with learning disabilities. There are various types of assistive technology that may aid children with learning disabilities in improving performance in education. At the present time, educators and therapists lack a comprehensive and easy to access resource to identifying assistive technology products that will assist them when working with children with learning disabilities.

At least 10 licensed educators and therapists who have been in their chosen field for 3 years or more and use assistive technology devices with learning disabled children from preschool to secondary school will be chosen for the research study. Criteria for selection will be a telephone/e-mail inquiry through a screening questionnaire. The method of selection is a convenience sample. Once educators and therapists have been selected, they will be briefed on the purpose and the content of the study. Participants of the study will become resources and will be acknowledged as such. Once the contributors meet the criteria a further questionnaire will be provided to specify the purpose of the low and high assistive technology with learning disabled children and any other resources utilized by educators and therapists. Information retained from verbal discussions will be compiled into a resource guide by the research investigators.

**STUDIES IN MOTION GRAPHICS
PANEL DISCUSSION/MULTI-MEDIA PRESENTATION**

John Jung, Carol Weber, Kevin Brady, Archie Cocke, and Paul Schranz*

Art and Media Communications
Division of Liberal Arts, CAS

ABSTRACT

A presentation on the use of sequential imagery, time-event studies, and the animation of still photographic content as an alternative medium of creative expression.

CONFLICT RESOLUTION STYLES OF SPECIAL EDUCATION AND REGULAR EDUCATION STUDENTS

Olga Boutov and Maribeth Montgomery Kasik*

Multicategorical Special Education
Division of Special Education, CE

ABSTRACT

The purpose of this study was to compare preferences in conflict resolution styles of special education and regular education students. 24 special education and 60 regular education students were administered a "Conflict Management Styles" questionnaire (Lieber, 1998), which provided a preference profile for six different conflict resolution styles. The findings indicated that regular education students used the compromising style in resolving conflicts significantly more frequently than special education students. Special education students used accommodating and avoiding strategies significantly more frequently than their regular education peers. Recommendations for conflict resolution training emphasize the necessity of a flexible usage of conflict management strategies.

TAJIKISTAN MIGRATION

Alisher Bozorov, and Francis Kostarelos*

**Social Science
Division of Liberal Arts, CAS**

ABSTRACT

Tajikistan is a small country in Central Asia, which is slightly larger than the size of Wisconsin. On the east it borders China, on the north Kirgizistan and Uzbekistan, on the west Uzbekistan, and on the south Afghanistan. To the western world, Tajikistan was known as the Socialist Republic that made up the Soviet Union. The regional diffusion routes of migration, religion, and language date back to the Alexander the Great, if not earlier, period. Territorial geography of Tajikistan has changed many times as invasions occurred over centuries. Throughout history Macedonians, Turks, Arbas, Russians, Persians, Samanids (Somonion), and Mongol conquerors have imposed upon Tajik region their own spear of cultural, religious, and linguistic influence. Today the lingua franca, common Tajik language derives from the 9th – 10th century. The arrival of the Samanids known as the Persian Empire brought about standard language, spatial interaction, and geographic realm to Tajikistan. Iran, the core regional power in the 9th century made Tajikistan a peripheral region. The cultural linkages that allowed Tajikistan to continue its socioeconomic relations with the surrounding countries were greatly influenced by language, religion, and culture. Throughout history Tajikistan never had its own distinct boundary. The region continuously shifted from the control of one Empire to a more hegemonic ethnic group. The human mobility and activity space was greatly observed within the occupied territory. Finally, in 1920s, the first time in history a formal region of Tajik political, territorial, cultural, and social identity was formed.

ENCRYPTION IN GLOBAL COMMUNICATION ITS POTENTIAL AND ITS PROBLEMS

Ray Smilgius (Faculty Sponsor: Winfried Rudloff)

Computer Science
Division of Science, CAS

ABSTRACT

Over the past few years, the Internet has brought about an explosion in global communication. As with any new invention of information transfer, this has lead to widespread intrusion of our privacy. As a consequence, methods have been devised to swart such intrusion by data encryption. Data Encryption is the process by which information is coded during transmission to render it unreadable to unauthorized persons. Conceptually the transmitted material is supposed to be secret, but is it really?

Billions of dollars are spent on computer security, and most of it is wasted on insecure products. For example, two email programs have the same user interface, but one of the programs is secure and the other one allows eavesdropping. A comparison may show that both programs have seemingly the same security features, but one might have a security hole and the other one doesn't. An experienced cryptographer can usually tell the difference; and a computer hacker with similar skills can easily steal your data for malicious purposes. No one can guarantee 100% security!

Encryption can be implemented through software or hardware. Generally, Encryption methods use mathematical algorithms and one or more encoding/decoding keys. Such keys are numeric values that make the transformation of data unique to those possessing the key(s). There are two main methods for encrypting data. One method uses a public key and a secret key. The sender encrypts the message with the receiver's public key, and the receiver decrypts the message with their secret key. A good algorithm can protect data to some extent for a period of time, but through reverse engineering, one can decipher the algorithm. In addition, distributed networking can recruit parallel computers to subdivide the problem (divide and conquer) using brute force algorithms. Unfortunately, there are few operations in mathematics that are truly 'irreversible'.

Security will always be a crucial issue, particularly, as more companies and academic institutions go online. E-commerce, national security, global education, and companies doing business worldwide via the web will have need for fool-proof encryption.

**AN INVESTIGATION FOR THE NECESSITY OF STRESS
ASSESSMENT QUESTIONNAIRE UTILIZATION IN PHYSICAL
DISABILITY OUTPATIENT SETTINGS AS A CONSISTENT MEANS OF
ADDRESSING A CLIENT'S PSYCHOSOCIAL COMPONENT**

Thomas G. Bancsi and Cynthia Carr*

Occupational Therapy
Division of Nursing and Health Science, CHP

ABSTRACT

Timely stress assessment and management is needed for better therapeutic outcomes. The author of this human subject study tested the non-standardized Schedule Of Recent Experience Questionnaire psychological assessment tool as a method of consistently evaluating a client's stress state. Twenty-seven subjects, 12 men/15 women between the ages of 24 and 70 were secured for study at a hand rehabilitation clinic. All subjects completed a quantitative, non-standardized, forty-two-question stress assessment questionnaire, a subjective stress *visual analog scale* (VAS), and a demographic profile. Comparisons were made of all data. Major trends were found. Alone, the quantitative questionnaire scored dangerous stress levels in 66.66% of the men and 53.33% of women. Combined, overall quantifiable and subjective matching of high stress occurred 22.22 %. The Schedule of Recent Experience Questionnaire may be useful to assess a client's stress level, validated by VAS scores in 22.22% of the subjects. In addition, the questionnaire might be used to assess a client's stress level over multiple therapy sessions, due to high dangerous stress scores seen in 66% of the subjects with greater than seven visits.

THE RESPONSE TO OPPOSITIONAL BEHAVIOR IN A PARTIAL HOSPITALIZATION PROGRAM: A MODEL OF BEHAVIOR MANAGEMENT

Joseph Day and Linda Buyer*

Psychology
Division of Psychology and Counseling, CE

ABSTRACT

Background: Admission to a therapeutic environment is usually hard. Many of the children present with histories of trauma, disrupted lives, uneven supervision, and a long list of different caregivers. Problems with cognition, perception and language can also make the world a very frustrating place. Whatever the burden, transitioning to a new environment is often very difficult. With a low tolerance for frustration, poor internal control and a defensive posture, the child's initial response (usually opposition), to this transition may lead to staff imposed limits. The ability to correctly assess the child's current behavioral, affective and cognitive state will determine how successful the transition will be. Given the importance of staff's response, a hierarchy of interventions that includes, verbal redirection, chill-out, time-out, and if needed the use of a quiet/seclusion room is used to offer choices and consequences with the ultimate goal of increasing the child's self-esteem, internal control and tolerance for frustration.

Procedure: 68 children 4 to 13 years of age were enrolled in a Partial Hospitalization Program during a 5-month observation period. This program uses a tracking system involving social reinforcement to shape, suppress, and reinforce behavior. Data was collected on staff's use of the program's hierarchy of intervention; in particular it's most restrictive intervention, the quiet/seclusion room. From this data a model of staff/patient interactions was determined.

Significance: For children who are in need of a therapeutic environment change is constant. Unfortunately it is also these children who are least likely to adapt quickly to the ever-shifting circumstances that surround them. How do we ease the transitions and lessen the load they bear. Understanding both the child's and staff's subjective response and subsequent actions during these transitions will help to create an environment that will be less taxing and more conducive for the child to have a corrective experience. In so doing we can increase self-esteem, internal control and tolerance for frustration.

EFFECT OF VERBAL POSITIVE REINFORCEMENT VERSUS VERBAL PUNISHMENT ON SUSTAINED ATTENTION IN A PATIENT WITH RIGHT CVA

Tonya Kohut and Jay Lubinski*

Communication Disorders
Division of Nursing and Health Science, CHP

ABSTRACT

This study compared the effects of verbal positive reinforcement and verbal punishment on the attention span of a 76-year old female ("R") who had a hemorrhage in the right cerebral hemisphere. R's primary deficit was severely decreased attention, negatively affecting virtually all communicative and cognitive skills, and manifesting as frequent off-topic comments.

During therapy, R. engaged in 2- and 3-digit addition and subtraction problems, which, because they were simple, isolated the dependent variable of attention span. R's attention was timed until she made three off-topic comments.

Therapy was applied in a "baseline followed by alternating treatments" design. During collection of baseline data, R. received no verbal praise, and off-topic comments were redirected with neutral comments without emotion. Treatment was then applied in a BCBCBBCCBCBC schedule, with B being verbal positive reinforcement and C being verbal punishment. One treatment type was applied per therapy session. During B phases, reinforcement was given periodically during periods of R's attending. During C phases, verbal punishment was given immediately following an off-topic comment.

Verbal positive reinforcement assisted R. in attending for significantly longer periods than did verbal punishment. Toward the end of treatment, R. began taking antidepressant medication, resulting in an even greater effect of the verbal positive reinforcement, but no change in the effect of punishment.

Therapy to increase attention in patients such as R. typically consists of biofeedback for attending, or redirection of off-topic behavior. Present results indicate that verbal positive reinforcement of attending may be a more effective treatment strategy.

THE ELECTRIC CITY & COMMONWEALTH EDISON COMPANY

Marcia Lindroth Batastini and Constance Cook*

Business Administration
College of Business & Public Administration, CBPA

ABSTRACT

As industrialization fueled the rapid growth of cities in the nineteenth century, the need for public utilities and services became painfully evident. Although public utilities and services lifted urban life to unprecedented levels of comfort, inherent flaws in existing technology and new problems arising from the city's continuing growth spurred the search for better solutions. A brighter system of lighting ranked high on the list of pressing needs for improving urban life. Chicago, was an ideal place for the application of electrical lighting as it was the urban hub of the Midwest and the fastest-growing city in the world. This drew innovative electrical and utility entrepreneurs, including Samuel Insull, the father of Commonwealth Edison Company. He believed the market did not work in public utility enterprises with heavy capital investments, and services could be provided more efficiently only by a single supplier, but, he also envisioned providing electricity to everyone at a modest price, and in so doing, making money and changing the world for the better.

ComEd, through the years, veered away from Insull's vision and entrepreneurial methods, which resulted in a plodding operating and management mentality. Consequently, it became a lumbering behemoth of a dinosaur with a culture of indifference, apathy, poor customer service, and with a crumbling transmission and distribution system.

POSTER PRESENTATIONS

IDENTIFYING THE SAFETY NEEDS OF THE WELL-ELDERLY IN A COMMUNITY SETTING: A POTENTIAL ROLE FOR OCCUPATIONAL THERAPY

Colette Bentley, Sarah Carter, and Patti Kalvelage*

Occupational Therapy
Division of Nursing and Health Sciences

ABSTRACT

The purpose of this research project was to identify the safety needs of the well elderly in a community setting. The community setting where this study was implemented was a senior congregate meal site. There were 5 subjects in this study who were all 60 years and older. Many of these patrons live independently, and manage their own safety issues. Since safety education is beneficial for seniors in the prevention of accidents and injury (as cited in the literature), the study investigated if this need is being addressed and if so, by whom. The information was acquired by conducting a safety interview. Most of the subjects had several safety concerns, with a variety of people addressing the concerns. However, there are often times when safety concerns are not addressed or resolved. Occupational therapists are trained to address these types of safety concerns and could be beneficial to this type of community setting.

A SINGLE CASE STUDY INVESTIGATING RHEUMATOID ARTHRITIS CLIENT'S SATISFACTION WITH AQUATIC THERAPY

Keri Code and SuAnne Griese, Cynthia Carr*

Occupational Therapy
Division of Nursing and Health Science, CHP

ABSTRACT

Arthritis is the most crippling disease in the United States with many different forms. Rheumatoid Arthritis affects many Americans with symptoms limiting daily activities due to stiffness and pain. Many clients with Rheumatoid Arthritis are using water as a therapeutic medium to reduce their symptoms. As more clients with Rheumatoid Arthritis use water for therapy, there is minimal research that explores their perspective on this treatment intervention. The purpose of this study was to determine the benefits of aquatic therapy on functional activities in two subjects with Rheumatoid Arthritis, that received aquatic therapy. The functional activities in this study were defined as activities of daily living (ADL's), work, play and leisure. This research added to the occupational therapy body of knowledge on the benefits of aquatic therapy in clients with Rheumatoid Arthritis.

This study incorporated a qualitative single subject design and used a convenient sample. The subjects involved in the study participated in three in-person semi-structured interviews, which investigated their satisfaction with aquatic therapy on performance of functional activities.

THE POWER OF THE MEDIA: FRAMING ISSUES AND INFLUENCING PUBLIC OPINION

Karyn Purvis and Ana Kong*

Communications and Training
Division of Liberal Arts, CAS

ABSTRACT

There are those who believe that the most powerful entity on the face of this planet is mass media. In many ways, we are at the mercy of those who make decisions regarding what they believe we need to know. Many candidates are successful because the press has decided to afford them coverage, while others are relegated to oblivion because they are ignored by television and newspaper reporters. The way that the news media frame a story can have a profound effect on the perception of the public.

This survey of research literature presents a graphic perspective on "the power of the press." The world of today's news media is a far cry from the days when the standard was "just the facts, ma'am, nothing but the facts."

The studies summarized explore the issues of framing effects, media bias, the use of sound bites, fairness, balance, objectivity, competition, and news slant as they relate to keeping the public informed. The results of this survey of research literature point to some disturbing outcomes when those who are charged with reporting the news actually become the news themselves. It is only human nature that personal ideology might creep into the stories that journalists pen, but it is their responsibility to be ever watchful and diligent to avoid all appearance of bias. Ethically, the news media should take very seriously the power that they wield when they frame stories, potentially shaping public opinion, affecting election results, and instilling cynicism and mistrust in the American people. This power should never be taken lightly.

CAN PET FACILITATED THERAPY BE USED TO ENHANCE SOCIAL SKILLS IN GERIATRIC CLIENTS?

LaShanda Gayle, LaTonya Easley, and Elizabeth Cada*

Occupational Therapy
Division of Nursing and Health Science, CHP

ABSTRACT

The purpose of this study was to gather information regarding the use of pet-facilitated therapy and determine whether it can be incorporated into occupational therapy services. Psychological and social benefits of pet-facilitated therapy may positively affect a client's quality of life. Currently, there is limited research in occupational therapy in which practitioners are involved in pet-facilitated therapy. The findings from the observations and interviews were analyzed and compared with previous literature to increase awareness of the participant's thoughts and feelings regarding pet-facilitated therapy as an occupational therapy intervention.

EFFECTS OF MEDICARE A ON JOB SATISFACTION AMONG OCCUPATIONAL THERAPISTS AND OCCUPATIONAL THERAPY ASSISTANTS

Naheed Karim, Parul Patel, and Jessica Pedersen*

Occupational Therapy
Division of Nursing and Health Science, CHP

ABSTRACT

According to the literature, the satisfaction of occupational therapists and occupational therapy assistants may be affected due to the changes in Medicare Part A in areas such as compensation, position, job responsibilities, work hours, limited treatment time, number of patients, and various diagnoses.

This study was conducted to determine the effects of Medicare A on job satisfaction among occupational therapists and occupational therapy assistants. A 43-question survey was developed and distributed to 100 occupational therapists and occupational therapy assistants working for three facilities in northern Illinois. The results of the surveys were analyzed using the Statistical Package for Social Sciences (SPSS) to determine the effects of Medicare Part A on job satisfaction among occupational therapists and occupational therapy assistants.

SMALL MAMMAL DISTRIBUTION IN URBAN-RURAL GRADIENTS

Randy Grass and John Yunger*

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ABSTRACT

The establishment of Chicago as an international center of culture, commerce, and industry, has resulted in a spillover of development in its suburban areas. Chicago is considered unique among large urban centers because of the diversity of its surrounding geography. Characterized by a mosaic of urban, suburban, and rural landscapes, the Chicago area is dotted with an extensive network of preserves and agricultural areas. The development of a 14000 ha (hectare) macrosite in the surrounding suburban area provided the ideal conditions for investigating the effects of urbanization on small mammals. In the falls of 1998 and 1999, 55 sites were snap-trapped. The sites were located along a 100 km-long, 15 km wide transect test areas. The transect originated near downtown Chicago and ended near the macrosite. Each test site consisted of three-100 m transects, with trapping stations arranged at 10m intervals. Traps were run for three consecutive days.

In addition to a protocol of specimen measurements and tests, data were also collected on nine environmental variables. These variables were used to explain the distribution and abundance of the small mammals collected along the urban-rural gradient: human density, habitat type, distance from urban center, soil metal toxicity, road density, landscape fragmentation, patch size, patch convolution, and habitat proximity. The white-footed mouse (*Peromyscus leucopus*), deer mouse (*Peromyscus maniculatus*), meadow vole (*Microtus pennsylvanicus*), prairie vole (*Microtus ochrogaster*), and a shrew (*Blarina brevicauda*), accounted for over 95% of all captures. Data revealed that small mammal abundance was greatest in the highly fragmented suburban region, followed by the large rural preserve areas. *Blarina* and *Microtus* were most common in the non-native grasslands throughout the transect belt, although *Blarina* (shrew) was absent from all urban locations. Though *peromyscus* was found to exist primarily in oak woodland and prairies, these areas had the lowest small mammal diversity and abundance.

THE IMPACT OF INTERDISCIPLINARY CURRICULUM ON THE PERCEPTIONS OF GRADUATE HEALTH PROFESSIONS STUDENTS

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ABSTRACT

The purpose of this study was to determine whether interdisciplinary education of occupational therapy and physical therapy students is beneficial in providing accurate perceptions of future occupational and physical therapy team members. No research had previously been conducted specifically regarding this matter. Therefore this study may be influential in determining the continuation of interdisciplinary curriculum among health care professionals. Three occupational and three physical therapy students were interviewed privately by the researchers. Occupational therapy students were asked questions in regards to previous exposure to physical therapy and vice versa for physical therapy students. The students' responses were indicative of their understanding of the other discipline and how their interdisciplinary classes might have informed them about the profession of occupational and physical therapy and perceived future benefits. The results of this study showed that all three of the occupational therapy students interviewed had previous exposure to physical therapy and they did not gain new knowledge of physical therapy. These students claimed that they perceived the team process as a benefit of interdisciplinary curriculum. Two out of three physical therapy students had previous exposure to occupational therapy, while the other student did not. Two out of three physical therapy students claimed that they gained new knowledge of occupational therapy. Two out of three physical therapy students claimed that one of the benefits of interdisciplinary curriculum is using occupational therapy as a resource. The other physical therapy student stated that teamwork was a benefit of interdisciplinary curriculum. The information discovered in this study might be useful for future studies into the benefits of interdisciplinary curriculum and provide insights into curriculum structures.

EXPLORING THE ROLES AND FUNCTION OF OCCUPATIONAL THERAPY IN EARLY IDENTIFICATION OF CHILDREN AT RISK

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ABSTRACT

The purpose of this project is two fold, first to determine the role and function of occupational therapy in early identification of children at risk. Secondly this study attempts to articulate the current needs of staff members who work in an early childhood setting to more adequately identify children at risk. For the purpose of this study, at-risk is defined by inclusion in the following categories: environmental risk, biological risk, and established risk. Established risks can be represented by a disruption in intellectual and emotional development such as disintegrating families, high level of child abuse, substance abuse, inadequate health care and child care of very poor quality (Lerner, Zowenthal, Egan, 1998). Early recognition of potential problems in children at risk would allow the child to be provided with early intervention and subsequently prevent or minimize delays.

This is a descriptive study that was conducted via semi-structured interviews with a small sample of staff members from a Family Development Center in the South Suburbs of Chicago. The outcome of this project will provide additional information regarding staff's knowledge of children at risk and potential educational needs, as well as exploring the role and function of occupational therapy in this type of setting.

PREPARATION OF QUINOLINE-8-CARBALDEHYDE AND ITS REACTION WITH RHENIUM-BOUND HYDRIDES

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ABSTRACT

Fischer Tropsch synthesis is the conversion of relatively inexpensive mixtures of carbon monoxide and hydrogen (synthesis gas) into more valuable organic compounds such as alkenes and alkanes, which are the principle components of petroleum. Fischer Tropsch synthesis has been known for nearly a century, but the mechanism of Fischer Tropsch synthesis is still not completely understood.

This project began from an examination of the reactions of ketones and aldehydes. It was found that aldehydes undergo decarbonylation at a rhenium polyhydride center. Given the ability to generate the components of synthesis gas (carbon monoxide and hydrogen) at a single metal center, we believe that this system offers promise as a model for Fischer Tropsch synthesis.

In this work, we have started to examine the mechanism of aldehyde decarbonylation at a rhenium polyhydride center. Specifically, we have prepared a bifunctional aldehyde molecule and looked at its reaction with $\text{ReH}_7(\text{PPh}_3)_2$. We have found two different products from the reaction, depending upon how the reaction mixture is worked up. Preliminary information seems to indicate that these products may be related to one another in the same fashion as keto or enol tautomers.

CLIENT-CENTERED OCCUPATIONAL THERAPY: THE EFFECTS OF CLIENT-CENTERED PRACTICE ON CLIENT SATISFACTION AND THE CLIENT-THERAPIST RELATIONSHIP

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ABSTRACT

“Client-centered practice is an approach to providing occupational therapy, which embraces a philosophy of respect for, and partnership with, people receiving services” (Law, Baptiste, & Mills, 1995). “Client-centered practice recognizes the autonomy of individuals, the need for client choice in making decisions about occupational needs, the strengths clients bring to a therapy encounter, the benefits of client-therapist partnership and the need to ensure that services are accessible and fit the context in which a client lives” (Law, Baptiste, & Mills, 1995).

It has been shown that patient participation in client-centered occupational therapy intervention increases functional outcomes (Kaplan, 1991 and Greenfield, Kaplan, Ware, Yano & Frank, 1988). The aim of this qualitative study is to determine how client-centered occupational therapy benefits the client and the client-therapist relationship, as identified by both the therapist and the client who is receiving occupational therapy services.

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